01038 Hammett #6 Allotment

DETERMINATION DOCUMENT

SECTION 1

___ All Standards are met or making significant progress towards meeting and there is conformance with the guidelines. (No Determination is required, review is complete)

_X_ One or more Standards are not being met or there is non-conformance with the guidelines. (An Authorized Officer's Determination is required, complete Section 2)

SECTION 2

1. Documentation of causal factors *(other than livestock grazing).*

Since 1957, 4,570 (70%) BLM acres have been burned by wildfire in Hammett #6. The 2000 Oregon Trail Fire burned 1,800 acres of BLM land affecting nearly all of Pasture 2, and portions of pastures 1 and 4. The 2010 Hot Tea and 2012 Stout fires combined (with some overlap) burned 3,335 acres of BLM land, encompassing nearly all of Pasture 4 and a small portion of Pasture 3. As a result, watershed function and ecological processes in mountain big sagebrush and low sagebrush communities have been altered. However, the majority of the sampling occurred outside of burned areas (only two rangeland health assessment locations and one trend plot burned prior to sampling).

2a. Is it more likely than not that existing grazing management practices or levels of grazing use are significant factors in failing to achieve the Standards or conform to the guidelines? *(YES/NO) Provide rationale.*

Yes.

The condition of the plant community has been altered by historic and past grazing use; however, current livestock management practices are not promoting recovery or improvement. The current livestock grazing authorization is for 563 cattle from March 27 to May 25, at 911 Animal Unit Months (AUMs), annually. The current permit allows livestock numbers to vary annually provided the period of use and AUMs are not exceeded.

The spring use period coincides with the critical growth period of perennial bunchgrasses. When light to moderate grazing occurs yearly during this period, perennial grasses are generally able to recover growth, set seed, and show little impact. However, if moderate to heavy grazing during this period occurs on an annual basis, bunchgrasses cannot achieve adequate re-growth to set seed and replace carbohydrate root reserves.

Repeated spring grazing causes plants to become weaker and smaller, and they may eventually die. This opens the area up to exotic annual grass invasions which in turn increase the probability of ignition and shortens the fire return interval. Ultimately, improper grazing

practices contribute to larger, more severe, and more frequent disruptions, such as fire, which damage native plant communities, watersheds, riparian areas and wildlife habitat. Long-term monitoring and rangeland health assessments found that the native plant communities in this allotment were degraded and declining and exotic annual grasses were increasing. Three out of four long-term trend locations did not burn during the sampling period; therefore, livestock grazing was the probable cause of the decline. Degradation from repeated spring livestock grazing likely contributed to the higher than expected fire frequency in Pasture 4.

2b. Is there conformance with Idaho Guidelines for Livestock Grazing Management? *(YES/NO) if not list the guidelines that are not in conformance and provide evidence)*

No. Livestock grazing management is not in compliance with the following guidelines:

Guideline 4 – Implement grazing management practices that provide periodic rest or deferment during critical growth stages to allow sufficient regrowth to achieve and maintain healthy, properly functioning conditions, including good plant vigor and adequate vegetative cover appropriate to site potential.

The current permit does not incorporate periodic rest or deferment during the critical growth period to allow sufficient regrowth to maintain healthy and vigorous perennial plants.

Guideline 8 – Apply grazing management practices that maintain or promote the interaction of the hydrologic cycle, the nutrient cycle, and energy flow that will support the appropriate types and amounts of soil organisms, plants, and animals appropriate to soil type, climate, and landform.

Invasive plants and low diversity of functional and structural groups is providing less than optimal conditions for adequate nutrient, energy and hydrologic cycling. Since few of the sampling locations burned prior to sampling, degradation is attributed to livestock grazing.

Guideline 9 – Apply grazing management practices to maintain adequate plant vigor for seed production, seed dispersal, and seedling survival of desired species relative to soil type, climate, and landform.

Species diversity is poor in the plant community evident by the lack of key understory species. Without adequate structural and functional species diversity, proper levels of nutrient and energy cycling does not occur to maintain a healthy and vigorous perennial plant community. Increasing exotic annual grasses result in native seedling mortality due to competition, and shortened fire return intervals that coincide with increased annual grasses leads to greater native plant mortality. Since few of the sampling locations burned prior to sampling, degradation is attributed to livestock grazing.

/s/ *Tate Fischer* May 27, 2014

Authorized Officer: Tate Fischer **Date**
Four Rivers Field Manager

SUMMARY OF EVALUATION AND DETERMINATION

Check Box 1, 2, 3, 4, or 5 (Do not add data or explanatory remarks here.)	STANDARDS							
	1	2	3	4	5	6	7	8
1) Meeting the Standard		X	X		N/A	N/A	X	
2) Not Meeting the Standard, **but making significant progress towards**								
3) Not Meeting the Standard, current livestock grazing management practices **are not** significant factors								X
4) Not meeting the Standard, current livestock grazing management practices **are** a significant factor	X			X				
5) Not meeting the Standard, cause not determined								
Guidelines for Livestock Grazing								
6) Conforms with Guidelines for Livestock Grazing Management								No
7) If no, list the guidelines not in conformance: 4, 8, and 9								